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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/765,708	01/27/2004	Deborah A. Klinkert	20067.0021US01	2573
52835 7590 08/20/2008 HAMRE, SCHUMANN, MUELLER & LARSON, P.C. P.O. BOX 2902 MINNEAPOLIS, MN 55402-0902				
EXAMINER EDWARDS, LOREN C				
ART UNIT 3748		PAPER NUMBER		
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/765,708

**Applicant(s)**

KLINKERT ET AL.

**Examiner**

LOREN C. EDWARDS

**Art Unit**

3748

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 17 July 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,3,4,6-8,10-15 and 17-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3,4,6-8,10-15 and 17-26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

1. An Applicant's Amendment filed on 7/17/08 has been entered. Claims 2, 5, 9, and 16 have been canceled; claims 1, 6, 11, 17, 19, and 22 have been amended; and claims 25 and 26 have been added. Overall, claims 1, 3, 4, 6-8, 10-15, and 17-26 are pending in the application.

***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 4, 11-14, 20-23, 25, and 26 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Vaughn (U.S. 3,111,190). Vaughn discloses an exhaust assembly for a marine genset, the exhaust assembly comprising: an exhaust manifold configured to emit cooling water and exhaust gases from a combustion engine (Col. 1, Lines 7-13); and a sound-dampening device (Figs. 1 and 2) configured to be coupled between the exhaust manifold and a muffler, the sound-dampening device including a tubular member (Fig. 1, No. 1) having an inner diameter and two or more distinct rings (Fig. 2, Nos. 3-7) located on the inner diameter of the tubular member, each ring having an inner surface exposing directly to an exhaust gas passageway in the tubular member (Fig. 3), the rings being configured to provide constriction of the passageway which causes mixing of the cooling water with the exhaust gases to reduce noise generated by the combustion engine (Col. 1, Line 7 – Col. 2, Line 23).

4. With regards to claim 4, Vaughn discloses the exhaust assembly of claim 1, as described above, and further wherein the tubular member is rigid (Fig. 1, No. 1) and is connectable between the exhaust manifold and an exhaust hose connected to the muffler, each ring having an outer diameter the same as the inner diameter of the tubular member (Col. 1, Lines 24-30) and an inner diameter smaller than the inner diameter of the tubular member (Fig. 3).

5. With regards to claim 11, Vaughn discloses an exhaust apparatus for a marine genset, comprising: a rigid tubular member (Fig. 1, no. 1) having a first end connectable to an exhaust outlet of a combustion engine, the tubular member including an inner diameter, the inner diameter having at least two distinct rings (Fig. 2, Nos. 3-7) mounted thereto, each ring having an outer diameter the same as the inner diameter of the tubular member (Col. 1, Lines 24-30) and an inner diameter smaller than the inner diameter of the tubular member (Fig. 3), each ring having an inner surface exposing directly to an exhaust gas passageway in the tubular member (Fig. 3), the rings being configured to provide constriction of the passageway which causes mixing of cooling water with exhaust gases to reduce noise generated by the combustion engine (Col. 1, Line 7 – Col. 2, Line 23).

6. With regards to claim 12, Vaughn discloses the exhaust apparatus of claim 11, as described above, and further wherein the tubular member is a rigid metal pipe (Fig. 1, No. 1).

7. With regards to claim 13, Vaughn discloses the exhaust apparatus of claim 11, as described above, and further wherein a second end of the tubular member is connectable to a flexible marine exhaust hose (Fig. 1, No. 1—downstream end).
8. With regards to claim 14, Vaughn discloses the exhaust assembly of claim 11, as described above, and further wherein the rigid tubular member includes a first ring (Fig. 2, No. 3) mounted to the first end of the rigid tubular member and a second ring (Fig. 2, No. 7) mounted to a second end of the rigid tubular member, the first ring and the second ring being 4 to 5 inches apart (Fig. 2).
9. With regards to claim 20, Vaughn discloses the exhaust assembly of claim 4, as described above, and further wherein the rigid tubular member includes a first ring (Fig. 2, No. 3) mounted to the first end of the rigid tubular member and a second ring (Fig. 2, No. 7) mounted to a second end of the rigid tubular member, the first ring and the second ring being 4 to 5 inches apart (Fig. 2).
10. With regards to claim 21, Vaughn discloses the exhaust assembly of claim 1, as described above, and further wherein the two or more rings located on the inner diameter of the tubular member, comprises two rings located at opposite ends of the tubular member (Fig. 2, Nos. 3 and 7).
11. With regards to claim 22, Vaughn discloses the exhaust assembly of claim 1, as described above, and further wherein each ring has a generally circular inner surface facing the exhaust gas passageway in the tubular member (Fig. 3).

12. With regards to claim 23, Vaughn discloses the exhaust assembly of claim 1, as described above, and further wherein each ring is in a plane perpendicular to the length of the tubular member (Fig. 1, Nos. 1, and 3-7).

13. With regards to claim 25, Vaughn discloses the exhaust assembly of claim 1, as described above, and further wherein each ring located on the inner diameter of the tubular member is a closed ring (Fig. 3).

14. With regards to claim 26, Vaughn discloses the exhaust assembly of claim 11, as described above, and further wherein each ring is in a plane perpendicular to the length of the tubular member (Fig. 1, Nos. 1, and 3-7).

***Claim Rejections - 35 USC § 103***

15. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

16. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

17. Claims 3, 6-8, 10, 17, 18, 19, and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vaughn in view of Jorg Alexnat et al. (U.S. 6,058,702).

Vaughn discloses the exhaust assembly of claim 1, as described above, and further wherein the tubular member is configured to be connected between the exhaust manifold and directly to the muffler, each ring having an outer diameter the same as the inner diameter of the tubular member (Vaughn; Col. 1, Lines 24-30) and an inner diameter smaller than the inner diameter of the tubular member (Vaughn; Fig. 3).

Vaughn fails to specifically describe wherein the tubular member is flexible. Jorg Alexnat discloses an exhaust system for a motor vehicle that describes to connect rigid members (Jorg Alexnat; Fig. 1, Nos. 17, 19, and 22) of an exhaust system with flexible connections (Jorg Alexnat; Fig. 1, Nos. 16, 18, and 21). It would have been obvious to one having ordinary skill in the art at the time the invention was made to include the flexible connections of Jorg Alexnat in the tubular member of Vaughn for the advantage of reduced vibration (Jorg Alexnat; Col 3, Lines 7-25).

18. With regards to claim 6, the modified Vaughn, as described in rejecting claim 3 above, discloses an exhaust apparatus for a marine genset, comprising: a flexible exhaust tubular (Vaughn; Fig. 1, No. 1; Jorg Alexnat; Fig. 1, Nos. 16, 18, and 21) member configured to be connected between an exhaust manifold of a combustion engine (Jorg Alexnat; Fig. 1, No. 6) and a muffler (Jorg Alexnat; Fig. 1, No. 23), the flexible exhaust tubular member having an inner diameter (Vaughn; Fig. 1, No. 1); and two or more distinct rings (Vaughn; Fig. 1, Nos. 3-7) located on the inner diameter of the flexible exhaust tubular member, each ring having an outer diameter the same as the inner diameter of the flexible exhaust tubular member (Vaughn; Col. 1, Lines 24-30) and an inner surface having an inner diameter smaller than the inner diameter of the flexible

exhaust tubular member (Vaughn; Fig. 3), each of the inner surfaces of the rings exposing directly to an exhaust gas passageway in the exhaust tubular member (Vaughn; Fig. 3), the rings being configured to provide constriction of the passageway which causes mixing of cooling water with the exhaust gases to reduce noise generated by the combustion engine (Vaughn; Col. 1, Line 7 – Col. 2, Line 23).

19. With regards to claim 7, the modified Vaughn discloses the apparatus of claim 6, as described above, and further wherein the two or more rings are evenly spaced about 4-1/2 inches apart from each other along a length of the flexible exhaust tubular member (Vaughn; Fig. 2, Nos. 3-6).

20. With regards to claim 8, the modified Vaughn discloses the apparatus of claim 6, as described above, and further wherein the flexible exhaust tubular member has an outer diameter of about 2 inches (Vaughn; Fig. 1, No. 1).

21. With regards to claim 10, the modified Vaughn discloses the apparatus of claim 6, as described above, and further wherein the length of the flexible exhaust tubular member is about 6 feet or less (Vaughn; Fig. 1, No. 1).

22. With regards to claim 17, the modified Vaughn, as described in rejecting claim 6 above, discloses an exhaust system for a marine genset, the exhaust assembly comprising: a combustion engine (Jorg Alexnat; Fig. 1, No. 6) having an exhaust to emit cooling water and exhaust gases; a muffler (Jorg Alexnat; Fig. 1, No. 23); a water separator (Vaughn; Fig. 2, Nos. 3-7); an exhaust hose (Jorg Alexnat; Fig. 1, No. 22) connecting the exhaust and the muffler; and an exhaust tubular member (Vaughn; Fig. 1, No. 1; Jorg Alexnat; Fig. 1, Nos. 16, 18, and 21) between the exhaust and the



exhaust hose, the tubular member having an inner diameter (Vaughn; Fig. 1, No. 1) and two or more distinct rings located on the inner diameter (Vaughn; Fig. 1, Nos. 3-7); each ring having an outer diameter the same size as the inner diameter of the tubular member (Vaughn; Col. 1, Lines 24-30) and an inner diameter smaller than the inner diameter of the tubular member (Vaughn; Fig. 3), each ring having a generally circular inner surface facing an exhaust gas passageway in the tubular member (Vaughn; Fig. 3), the rings being configured to provide constriction of the passageway which causes mixing of the cooling water with the exhaust gases to reduce noise generated by the combustion engine (Vaughn; Col. 1, Line 7 – Col. 2, Line 23).

23. With regards to claim 18, the modified Vaughn discloses the exhaust assembly of claim 17, as described above, and further wherein the two or more rings are evenly spaced about 4-1/2 inches apart from each other along a length of the flexible tubular member (Vaughn; Fig. 2, Nos. 3-6).

24. With regards to claim 19, the modified Vaughn discloses the exhaust assembly of claim 3, as described above, and further wherein the two or more rings are evenly spaced about 4-1/2 inches apart from each other along a length of the flexible tubular member (Vaughn; Fig. 2, Nos. 3, 4, 5, and 6).

25. With regards to claim 24, the modified Vaughn discloses the exhaust assembly of claim 17, as described above, and further wherein each ring is in a plane perpendicular to the length of the tubular member (Vaughn; Fig. 1, Nos. 1, and 3-7).

26. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Vaughn in view of design choice. Vaughn discloses the apparatus of claim 11, as described

above, but fails to expressly disclose the tubular member and the rings being made of stainless steel. At the time the invention was made, it would have been an obvious matter of design choice to a person of ordinary skill in the art to make the tubular member and rings out of stainless steel because Applicant has not disclosed that the stainless steel material provides an advantage, is used for a particular purpose, or solves a stated problem. One of ordinary skill in the art, furthermore, would have expected Applicant's invention to perform equally well being made of stainless steel because stainless steel is commonly used in internal combustion engine exhaust applications. Therefore, it would have been an obvious matter of design choice to modify Vaughn to obtain the invention as specified in claim 15.

### ***Response to Arguments***

27. Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LOREN C. EDWARDS whose telephone number is (571)272-2756. The examiner can normally be reached on M-TH 5:30-4.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Denion can be reached on (571) 272-4859. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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